

Amendments to the Claims

Please amend Claims 1, 23, 38, 41, 42, 43, 44, 56 and 59. Please add new Claims 62-74.

The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently Amended) A method of monitoring supply chain activity, comprising:

scanning for changed supply-related data at independent supply chain sites within the supply chain;

extracting the supply-related data at the independent supply chain sites ~~within the supply chain~~, the data being maintained in plural formats at the supply chain sites, where each of the supply chain sites represents an independent entity in the supply chain;

translating the extracted data into a common format;

uploading the extracted data from each supply chain site to a data collection site, the data collection site collecting the extracted data; and

upon a request from a user associated with one of the supply chain sites,

formatting, at the data collection site, a portion of the collected data, retrieved from one of the supply chain sites other than the site of the user, into one of a plurality of views, responsive to criteria selected by the user, for presentation to the user, the portion of formatted data being dependent on access rights granted to the user's supply chain site, and

publishing the formatted data view to the user's supply chain site;

at the data collection site, monitoring inbound data from multiple supply chain sites;

detecting a problem condition if there is a surplus or shortage in the collected data retrieved from at least one of the supply chain sites other than the site of the user; and

responding to the problem condition by asserting an alert to the user, where the alert indicates a problem condition associated with at least one of the supply chain sites other than the site of the user.

2. (Original) The method of Claim 1 wherein the data is translated at each supply chain site before uploading.
3. (Original) The method of Claim 1 wherein the data is translated at the data collection site after uploading.
4. (Original) The method of Claim 1, further comprising, at each supply chain site:
 scanning for new or changed data at regular intervals; and
 uploading upon finding new or changed data.
5. (Original) The method of Claim 1, wherein at least one format is a spreadsheet.
6. (Original) The method of Claim 1, wherein at least one format is a relational database.
7. (Original) The method of Claim 1, wherein at least one format is a text file.
8. (Original) The method of Claim 1 wherein at least two formats at one or more supply chain sites are different.
9. (Original) The method of Claim 1 wherein data comprises inventory data.
10. (Original) The method of Claim 1 wherein data comprises purchase orders.
11. (Previously presented) The method of Claim 1 wherein data stored at the supply chain sites is stored in legacy database systems.
12. (Canceled)

13. (Previously Presented) The method of Claim 1 wherein raising an alert comprises highlighting an Alert indicator on a user screen.
14. (Original) The method of Claim 13 further comprising, upon selection of the highlighted Alert indicator by a user:
displaying details of the detected problem condition.
15. (Original) The method of Claim 14 wherein the details of the detected problem condition are displayed in a graphical format.
16. (Original) The method of Claim 1 further comprising:
using animation to present the data to a user.
17. (Previously Presented) The method of Claim 1, wherein the supply chain sites further includes contract managers (CMs), vendors, distributors and an original equipment manufacturer (OEM).
18. (Original) The method of Claim 1, further comprising:
encrypting the data before uploading.
19. (Original) The method of Claim 1 wherein uploading is over the Internet.
20. (Original) The method of Claim 1 further comprising:
providing, to the data collection site, materials requirements information for a product at any or all stages in the product's lifecycle.
21. (Original) The method of Claim 1, further comprising:
generating an analysis report responsive to report selection by a user; and
providing the generated report responsive to user selection of report destinations.

22. (Original) The method of Claim 21, wherein providing the generated report comprises at least one of emailing, printing, storing as a file or displaying on a monitor or a screen, the report.
23. (Currently Amended) A system for monitoring supply chain activity, comprising:
a data collection center, comprising
a data collector; and
a publisher for publishing data from the data collector upon request; and
a plurality of independent supply chain sites within the supply chain, each supply chain site representing an independent entity in the supply chain,
comprising:
a data storage device for maintaining supply-related data;
a data transfer engine (DTE) which detects changed supply-related data at the data storage device, extracts the supply-related data from the data storage device and transfers the extracted data to the data collection center;
input means for allowing a user associated with a supply chain site to query the data collector for supply-related data retrieved from one of the supply chain sites other than the site of the user;
a display for displaying data published by the publisher in response to a query; and
an alert indicator which indicates an alert condition if there is a surplus or shortage associated with one of the supply chain sites other than the site of the user in the supply chain.
24. (Original) The system of Claim 23, wherein the data collector is a database.
25. (Original) The system of Claim 23, wherein data stored at a supply chain site is stored in at least one of a database, a spreadsheet, and a text file.

26. (Original) The system of Claim 23 wherein the DTE comprises encryption means for encrypting the data before transferring.
27. (Original) The system of Claim 23 wherein data is displayed in a window on the display at a site according to a category selected by a user at the site, responsive to authorization granted to the site.
28. (Original) The system of Claim 27 further comprising, for each category, at least one analysis filter selectable by the user for setting criteria to be used in filtering the data to be displayed.
29. (Original) The system of Claim 28 wherein filtering comprises sorting.
30. (Original) The system of Claim 28 wherein filters are organized hierarchically.
31. (Previously Presented) The system of Claim 27 further comprising, in each window, including the alert indicator for indicating the existence of an alert condition.
32. (Original) The system of Claim 31, wherein the alert turns red to indicate the existence of an alert condition.
33. (Original) The system of Claim 31, where an alert condition indicates a shortage.
34. (Original) The system of Claim 31, where an alert condition indicates a surplus.
35. (Original) The system of Claim 31 wherein alert conditions are represented in graphical form.
36. (Original) The system of Claim 35 wherein alarm conditions and lead times are color-coded.

37. (Original) The system of Claim 35 wherein when the user clicks in the graphical representation, detailed information about the alert is displayed.
38. (Currently Amended) A computer program product for monitoring a supply chain, the computer program product comprising a computer usable medium having computer readable code thereon, including program code which:
- receives, at a data collection site, supply-related data extracted from at least one independent supply chain site, supply-related data being maintained in different formats at different supply-chain sites, where each of the supply chain sites corresponds to an independent entity in the supply chain, the supply-related data being received in response to a comparison that detects changes in the supply-related data;
 - stores, at the data collection site, the received data in a common format;
 - upon a user request, the user being associated with a supply chain site,
 - formats a portion of the collected data, retrieved from at least one of the supply chain sites other than the site of the user, into one of a plurality of views,
 - responsive to criteria selected by the user, for presentation to the user, the portion of formatted data being dependent on access rights granted to the user,
 - and publishes the formatted data view to the user;
 - at the data collection site, monitoring inbound data from multiple supply chain sites;
 - detecting a problem condition if there is a supply chain surplus or shortage in the collected data retrieved from at least one of the supply chain sites other than the site of the user; and
 - responding to the problem condition by asserting an alert, where the alert indicates a problem condition associated with at least one of the supply chain sites other than the site of the user.
39. (Original) The computer program product of Claim 38, which additionally translates the data to a common format.

40. (Previously Presented) The computer program product of Claim 39, wherein the data is translated to a common format at the supply chain site.

41. (Currently Amended) A computer system comprising:

a processor located at a data collection site;
a memory system connected to the processor; and
a computer program, in the memory, which:

receives supply-related data extracted from at least one independent supply chain site, wherein the data is maintained and extracted at plural supply chain sites in plural formats, each of the supply chain sites representing an independent entity in the supply chain, where the supply-related data is received in response to a comparison that detects changes in the supply-related data;

upon a user request, the user being associated with a supply chain site,

formats a portion of the collected data, retrieved from at least one of the supply chain sites other than the site of the user, into one of a plurality of views, responsive to criteria selected by the user, for presentation to the user, the portion of formatted data being dependent on access rights granted to the user, and

publishes the formatted data view to the user;

at the data collection site, monitoring inbound data from the supply chain site;

determining a problem condition if there is a supply chain shortage or surplus detected in the collected data retrieved from at least one of the supply chain sites other than the site of the user; and

responding to the problem condition by asserting an alert, where the alert indicates a problem condition associated with at least one of the supply chain sites other than the site of the user.

42. (Currently Amended) A computer data signal embodied in a carrier wave for allowing users to monitor a supply chain, comprising:

program code for receiving, at a data collector site, supply-related data extracted from ~~a plurality of~~ one or more of the independent supply chain sites in response to detecting changes in the supply-related data based on a comparison, each of the supply chain sites representing an independent entity in the supply chain, wherein the data is maintained at the supply chain sites in plural formats;

program code for storing the received data in a common format, at the data collection site;

program code for formatting, at the data collection site, and upon a user request, the user being associated with a supply chain site, a portion of the collected data, retrieved from at least one of the supply chain sites other than the site of the user, into one of a plurality of views, responsive to criteria selected by the user, for presentation to the user, the portion of formatted data being dependent on access rights granted to the user;

program code for publishing the formatted data view to the user;

program code for monitoring, at the data collection site, inbound data from multiple supply chain sites;

program code for detecting a problem condition if there is a supply chain surplus or shortage detected in the collected data retrieved from at least one of the supply chain sites other than the site of the user; and

program code for responding to the problem condition by asserting an alert, where the alert indicates a problem condition associated with at least one of the supply chain sites other than the site of the user.

43. (Currently Amended) A system for monitoring supply chain activity comprising a plurality of supply chain sites, comprising:

means for monitoring changed supply-related data at independent supply chain sites within the supply chain;

means for extracting, at each supply chain site, the supply-related data to be monitored, wherein the data is maintained in plural formats located among the supply chain sites, at least one of the supply chain sites corresponding to an independent entity in the supply chain, being independent of another supply chain site;

means for translating the data to a common format;

means for uploading and collecting, from each supply chain site, the extracted data to a data collection site;

means for formatting, at the data collection site, a portion of the collected data, retrieved from at least one of the supply chain sites other than the site of the user, into one of a plurality of views, responsive to criteria selected by a user associated with a supply chain site, for presentation to the user, the portion of formatted data being dependent on access rights granted to the user's supply chain site;

means for publishing the formatted data view to the user's supply chain site;

means for monitoring, at the data collection site, inbound data from multiple supply chain sites;

means for detecting a problem condition if there is a supply chain surplus or shortage detected in the collected data retrieved from at least one of the supply chain sites other than the site of the user; and

means for responding to the problem condition by asserting an alert, where the alert indicates a problem condition associated with at least one of the supply chain sites other than the site of the user.

44. (Currently Amended) A method of monitoring supply chain activity, the supply chain having a plurality of supply chain sites, the method comprising:

establishing a communications link between a first supply chain site and a data collection center;

installing a data transfer engine (DTE) in the first supply chain site, the first supply chain site being independent of a second supply chain site in the supply chain, the first supply chain site maintaining proprietary supply chain information in a format that is

different from a format in which the second supply chain site maintains proprietary supply chain information, the DTE;

in response to detecting changes in the respective proprietary information at the first supply chain site, triggering an event by:

extracting the respective proprietary supply-related information from the first supply chain site, and

forwarding, over the communications link, the extracted proprietary information to a data collection center;

monitoring the proprietary information for problem condition, the problem condition resulting from a surplus or shortage in the extracted proprietary information from the first supply chain site; and

responding to a problem condition by asserting an alert to the second supply chain site.

45. (Previously Presented) The method of Claim 44 wherein the monitoring at the DTE the respective proprietary information of the first supply chain site for changes, and the triggering event being responsive to detecting a change to the respective proprietary information.
46. (Previously Presented) The method of Claim 44, the triggering event being the end of a time period.
47. (Previously Presented) The method of Claim 44, the triggering event being a request from the data collection center.
48. (Previously Presented) The method of Claim 44, the link comprising any or all of: Internet; a dial-up connection; and a virtual private network.
49. (Previously Presented) The method of Claim 44, the forwarded data being formatted using a formatting language.

50. (Previously Presented) The method of Claim 49, wherein the formatting language is XML.
51. (Previously Presented) The method of Claim 44, the DTE being implemented in software.
52. (Previously Presented) The method of Claim 44, the DTE further:
prior to forwarding selected data to the data collection center, translating the selected data to a common format accepted by the data collection center.
53. (Previously Presented) The method of Claim 44, the data collection center analyzing the supply chain based on proprietary information from at least the first and second supply chain sites, all proprietary information having been translated into the common format.
54. (Previously Presented) The method of Claim 44, the data collection center analyzing the supply chain based on proprietary information from at least the first and second supply chain sites.
55. (Previously Presented) The method of Claim 44, wherein the proprietary information includes any or all of orders, lead times, inventory, enterprise resource planning data, material resource planning data, and purchasing information.
56. (Currently Amended) A method of monitoring, at a data collection center, supply chain activity, the supply chain including a plurality of supply chain sites, the method comprising:
scanning for changed supply-related information at independent supply chain sites within the supply chain;
receiving, from at least two of the independent supply chain sites corresponding to independent entities in the supply chain, supply-related information, said information

being extracted from said supply chain site and being proprietary as to that supply chain site, the supply chain sites maintaining their respective proprietary information in different formats;

storing the received information in a database, in a common format;

receiving, from a user at a first supply chain site of the plurality of supply chain sites, a request for information from one or more of the supply chain sites other than the site of the user; and

in response to the request,

formatting requested information into one of a plurality of views, the information provided being dependent on access rights granted to the user's supply chain site,

performing an analysis of the supply chain based on the information received from the plural supply chain sites to determine if there is a surplus or shortage in the supply chain associated with one or more of the supply chain sites other than the site of the user,

asserting an alarm condition resulting from the analysis, and

forwarding the formatted view to the user.

57. (Previously Presented) The method of Claim 56, wherein proprietary information is received from at least one supply chain site in the common format, said proprietary information having been translated to the common format at the supply chain site.
58. (Previously Presented) The method of Claim 56, herein proprietary information is received from at least one supply chain site in the supply chain site's proprietary format, the method further comprising:
 - translating said received proprietary information into the common format.
59. (Currently Amended) A method of monitoring supply chain activity, the supply chain comprising a plurality of supply chain sites, at least two supply chain sites being

independent of each other representing independent participants in the supply chain, the method comprising:

at each supply chain site:

maintaining proprietary supply chain information in a format that is different from a format in which at least one other supply chain site maintains its proprietary supply chain information,

extracting selected proprietary supply-related information, and

upon a triggering event in response to detecting changes in the proprietary supply-related information, forwarding the extracted proprietary information to a data collection center that operates independently of the supply chain site; and

at the data collection center:

receiving, from each supply chain site, the respective forwarded

proprietary supply chain information,

storing the received information in a database, in a common format,

receiving, from a user at a first supply chain site of the plurality of supply chain sites, a request for information concerning a supply chain site other than the site of the user, and

in response to the request,

formatting requested information into one of a plurality of views, the information provided being dependent on access rights granted to the user's supply chain site,

performing an analysis of the supply chain based on the information

received from the plural supply chain sites to determine if there is a surplus or shortage in the supply chain asserting an alarm condition resulting from the analysis, where the alarm condition indicates a problem concerning the supply chain site other than the site of the user; and

forwarding the formatted view to the user.

60. (Previously Presented) A method of monitoring supply chain activity, the method comprising:

from a plurality of independent supply chain sites, extracting proprietary supply-related information into a common format, where at least one of supply chain sites corresponds to a vendor and at least one of supply chain site corresponds to a distributor;

at the supply chain sites, monitoring the proprietary information to detect any changes;

receiving a request, from the vendor supply chain site, for supply chain information concerning the distributor supply chain site;

in response to the request, providing a portion of the proprietary information extracted from the distributor supply chain site, where the provided portion is based on access rights granted to the vendor supply chain site; and

responding to a change detected in the proprietary supply chain information extracted from the distributor supply chain site by asserting an alert at the vendor supply chain site.

61. (Previously Presented) The method of Claim 60, wherein the supply chain sites further include contract managers (CMs), and an original equipment manufacturer (OEM).

62. (New) A data importation method comprising:

receiving first product data in a first format;

comparing the first product data with second product data previously received;

reviewing results of the comparison to determine whether there is a problem with the first product data;

changing a format of the first product data to a standard format;

comparing the standard format first product data with third product data, the third product data corresponding to the second product data having format changed to the standard format;

placing the standard format first product data in a category based on the

comparison of the standard format first product data with the third product

data; and
generating statistics based on the comparison of the standard format first product data with the third product data.

63. (New) The method of claim 62, wherein placing the standard format first product data in a category comprises placing the standard format first product data in an identical products file.
64. (New) The method of claim 62, wherein placing the standard format first product data in a category comprises placing the standard format first product data in a new products file.
65. (New) The method of claim 64, further comprising:
 - retrieving original supplier data for an original supplier product;
 - normalizing at least one company in the retrieved supplier data;
 - looking up the original supplier product in a product database to determine whether data corresponding to the original supplier product has been provided by other suppliers;
 - locating a template for the original supplier product corresponding to the retrieved supplier data;
 - normalizing at least one attribute from the retrieved supplier data by using the template;
 - defining normalized product data as the supplier data having the normalized at least one company and the normalized at least one attribute; and
 - inserting the normalized product data into the product database.
66. (New) The method of claim 65, wherein the step of normalizing at least one company comprises normalizing vendors and manufacturers associated with the product.
67. (New) The method of claim 65, wherein the looking the product up step comprises determining whether the retrieved product data already exists in the product database.

68. (New) The method of claim 67, further comprising:
comparing the normalized at least one attribute with existing attributes;
selecting correct attribute values; and
updating the normalized product data in the product database with the correct attribute values.
69. (New) The method of claim 65, further comprising a step of updating attribution definitions before the step of inserting the normalized product data.
70. (New) The method of claim 65, further comprising:
identifying a category associated with the original supplier product;
retrieving original supplier data for other original supplier products; and
optionally assigning to the located template all products in the other supplier original products corresponding to the identified category.
71. (New) The method of claim 62, wherein placing the standard format first product data in a category comprises placing the standard format first product data in a changed products file.
72. (New) The method of claim 62, wherein placing the standard format first product data in a category comprises placing the standard format first product data in a deleted products file.
73. (New) The method of claim 72, further comprising:
retrieving product data from the delete products file;
looking up the retrieved product data in the product database;
deleting from the database the retrieved product data, which corresponds to a first supplier, when a product corresponding to the retrieved product data has not been

deleted for all other suppliers.

74. (New) The method of claim 62, wherein placing the standard format first product data in a category comprises placing the standard format first product data in a faulty products file.